



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-831-5508

7 August 1997

Mr. Philip Otis, P.E., Remedial Project Manager
US Department of the Navy, Northern Division
Code 18, Mail Stop #82
10 Industrial Highway
Lester, PA 19113-2090

RE: Technical Memoranda - Ecological Risks from Groundwater at Sites 06,08, 11, and 13
Ecological Risk-Based Surface Soil Remediation Evaluation
NCBC Davisville, Rhode Island
Submitted 3 July 1997, Dated 1 July 1997

Dear Mr. Otis;

The Rhode Island Department of Environmental Management, Office of Waste Management has reviewed the above referenced document and comments are attached.

If you have any questions or require additional information please call me at (401) 277-3872 ext. 7138.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Gottlieb".

Richard Gottlieb, P.E.
Principal Sanitary Engineer

Attachment:

cc: W. Angell, DEM OWM
C. Williams, EPA Region 1
H. Cohen, RIEDC
M. Cohen, ToNK
W. Davis, CSO NCBC
J. Shultz, EA Eng.

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Comments For:

**Technical Memoranda
Ecological Risks from Ground Water
at NCBC IR Sites 06, 08, 11, and 13
&
Ecological Risk-Based Surface Soil Remediation Evaluation**

Submitted 3 July 1997, Dated 1 July 1997

1. Page 11-2, Site 11 Evaluation, Step 1.

Please reference the July 1997 sampling results in this section and utilize them in subsequent sections as appropriate.

2. Pages 13-9 to 13-16, Section 1.1, Application of Ecological Risk-Based Soil-Remediation Evaluation at Site 13.

The soil sample taken at DV13SW12A has a PCB concentration of 22 mg/kg comprised of 10 mg/kg Aroclor 1254 and 12 mg/kg Aroclor 1248. The RIDEM standard for PCBs in a commercial/industrial scenario is 10 mg/kg. Hazard Quotients (HQ) were not calculated for this sample, but were calculated for sample S-13-08-00-S approximately 150 feet away at 59.8 and 34.9 which represent a concentration of 1.1 ppm for Aroclor-1248 and 1.4 ppm for Aroclor-1254, respectively. In addition, at sample location B-13-06-00-S a 1.3 ppm concentration of Aroclor-1254 yielded an HQ of 32.4. In all cases the Hqs were referenced to the shrew.

The above calculated Hqs are over the threshold of 10. The concentrations of Aroclor-1248 and Aroclor-1254 in sample DV13SW12A are approximately nine times the concentrations at sample locations S-13-08-00-S and B-13-06-00-S. Therefore, one could reasonably conclude that the Hqs for Aroclors 1248 and 1254 at sample location DV13SW12A would be greater than the calculated Hqs at sample locations S-13-08-00-S and B-13-06-00-S.

Based on the RIDEM Site Remediation regulations, amended August 1996, since a risk has been shown and the PCB concentration is above 10 ppm RIDEM will require remediation of the PCBs at this site. Therefore, RIDEM would expect that a workplan will be submitted for the removal of PCBs at this site. If the Navy elects to remove the PCBs the workplan that was utilized for the previous removal action at this site would be acceptable.